

The following Listing of Claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1. (Currently Amended) [[The]] A bag-manufacturing and packaging system comprising:

a vertical bag-manufacturing and packaging machine that is configured to manufacture a bag by sealing a tubular continuous packaging material filled with items to be packaged, and ~~which cuts and discharges~~ to cut and discharge the bag at a predetermined discharge position;

a conveyance unit that is configured to receive the bag discharged from the vertical bag-manufacturing and packaging machine and convey the bag downstream; and

a drop orientation control unit that is disposed between the vertical bag-manufacturing and packaging machine and the conveyance unit and configured to feed the bag discharged from the vertical bag-manufacturing and packaging machine substantially to a predetermined position on the conveyance unit while maintaining the drop orientation of the bag even when the bag is discharged from the vertical bag-manufacturing and packaging machine at a position other than the predetermined discharge position.

2. (Previously Presented) The bag-manufacturing and packaging system of claim 1, wherein

the drop orientation control unit includes a rotor that feeds the bag discharged from the vertical bag-manufacturing and packaging machine substantially to the predetermined position on the conveyance unit.

3. (Previously Presented) The bag-manufacturing and packaging system of claim 2, wherein

the drop orientation control unit includes another rotor such that the pair of rotors sandwich the bag discharged from the vertical bag-manufacturing and packaging machine and feed the bag to the predetermined position on the conveyance unit.

4. (Original) The bag-manufacturing and packaging system of claim 3, wherein the pair of rotors have elasticity in a radial direction around their rotational axes.

5. (Previously Presented) The bag-manufacturing and packaging system of claim 3, wherein

an interval between the pair of rotors is adjustable.

6. (Previously Presented) The bag-manufacturing and packaging system of claim 3, wherein

the pair of rotors are independently driven.

7. (Previously Presented) The bag-manufacturing and packaging system of claim 3, further comprising

a rotation control unit that is configured to control rotational speeds of the pair of rotors.

8. (Previously Presented) The bag-manufacturing and packaging system of claim 3, wherein

the pair of rotors are disposed such that rotational axes of the rotors are on a horizontal plane.

9. (Previously Presented) The bag-manufacturing and packaging system of claim 3, wherein

the pair of rotors are disposed such that the rotational axes of the rotors are on a plane that is slanted relative to a horizontal direction.

10. (Previously Presented) The bag-manufacturing and packaging system of claim 3, wherein

the vertical bag-manufacturing and packaging machine includes a longitudinal sealing mechanism that seals a sheet-like packaging material along a conveyance direction when forming the packaging material into a tubular form, and a transverse sealing mechanism that seals the tubular packaging material in a direction perpendicular to the conveyance direction of the packaging material, and

the pair of rotors are disposed at a position that is directly below the predetermined discharge position of the bag in the transverse sealing mechanism and lower by about a conveyance direction length of one bag.

11. (Original) The bag-manufacturing and packaging system of claim 10, wherein the transverse sealing mechanism includes a pair of rotary-type sealing jaws.

12. (Previously Presented) The bag-manufacturing and packaging system of claim 3, wherein

the conveyance unit is disposed at a position that is directly below the pair of rotors and lower by about a conveyance direction length of one bag.

13. (Previously Presented) The bag-manufacturing and packaging system of claim 3, wherein

the pair of rotors are disposed at an intermediate position between the predetermined discharge position of the bag in the vertical bag-manufacturing and packaging machine and the predetermined position on the conveyance unit at which the bag is dropped.

14. (Previously Presented) The bag-manufacturing and packaging system of claim 3, wherein

the conveyance unit comprises a belt conveyor that is pivotable around a conveyance direction end of the belt conveyor.

15. (Previously Presented) The bag-manufacturing and packaging system of claim 3, further comprising

a rotor interval adjustment unit that is configured to adjust the interval between the pair of rotors, and

an interval control unit that is configured to control the adjustment of the interval between the pair of rotors by the rotor interval adjustment unit.

16. (Previously Presented) The bag-manufacturing and packaging system of claim 15, wherein

the interval control unit configured to control the rotor interval adjustment unit in accordance with the size of the bag to be manufactured in the vertical bag-manufacturing and packaging machine.

17. (Previously Presented) The bag-manufacturing and packaging system of claim 3, further comprising

a positioning member that supports the pair of rotors so as to allow the pair of rotors to adjust their positions with respect to the vertical bag-manufacturing and packaging machine.

18. (Previously Presented) The bag-manufacturing and packaging system of claim 2, wherein

the rotor has an elastic member on its surface.

19. (Previously Presented) The bag-manufacturing and packaging system of claim 2, wherein

the rotor rotates at the same speed as a drop speed at which the bag is discharged from the vertical bag-manufacturing and packaging machine or at a faster speed than the drop speed.

20. (Previously Presented) The bag-manufacturing and packaging system of claim 2, further comprising

a cantilever support mechanism that cantilever-supports the rotor.

21. (Previously Presented) The bag-manufacturing and packaging system of claim 2, further comprising

a pullout mechanism that slidably supports the rotor so as to allow the rotor to be pulled from between the vertical bag-manufacturing and packaging machine and the conveyance unit.

22. (Previously Presented) The bag-manufacturing and packaging system of claim 2, wherein

side portions of the rotor in the rotational axis direction of the rotor are formed by a harder material than material with which the center portion of the rotor is formed.

23. (Previously Presented) The bag-manufacturing and packaging system of claim 2, wherein

the surface of the rotor is covered by a brush that radially spreads around the rotational axis of the rotor, and

bristles of the brush are longer at both side portions in the rotational axis direction of the rotor than those at the center portion.

24. (Previously Presented) The bag-manufacturing and packaging system of claim 2, wherein

the rotor includes a cooling mechanism configured to cool a seal portion of the bag discharged from the vertical bag-manufacturing and packaging machine.

25. (Previously Presented) The bag-manufacturing and packaging system of claim 2, wherein

the conveyance unit has a fixed chute, and

the drop orientation control unit is configured to sandwich the bag discharged from the vertical bag-manufacturing and packaging machine between the rotor and a conveyance surface of the fixed chute.

26. (Previously Presented) The bag-manufacturing and packaging system of claim 2, wherein

the conveyance unit has a belt conveyor, and

the drop orientation control unit is configured to sandwich the bag between the rotor and a conveyance surface of the belt conveyor.

27. (Original) The bag-manufacturing and packaging system of claim 1, wherein the drop orientation control unit includes a multiple serial rotor including plural rotors.